

Procedure No: GSI/SOP/G/A/RK/1 Date Issued: August 14, 2009

Page 1 of 2

GREAT SHIPS INITIATIVE (GSI) STANDARD OPERATING PROCEDURE (SOP) DEVIATION FORM

DATE/TIME: 9/25/2009 (Form Completed 10/27/2009)

TEST ID NUMBER: 09-SI-6

RDTE FACILITY OR BENCH-SCALE TESTING? Research, Testing, and Evaluation Facility Test GSI RESEARCH TEAM MEMBER NAME/TITLE: Kelsey R. Prihoda, GSI Assistant QA/QC Officer

Deviation Number	Description of Deviation (Include SOP Number and Title)	Detailed Description of Impact on Study (If Any)	Description of Corrective Actions Taken (If Needed)
	SOP No: GSI/SOP/BS/RA/RT/8 — Procedure for Assessing Chronic Residual Toxicity of a Ballast Water Treatment System to the Green Alga (Selenastrum capricornutum; DRAFT). Section "Test Procedure", ¶5. Average initial S. capricornutum density was 213,333 cells/mL. Each milliliter of inoculum must contain enough cells to provide an initial cell density of approximately 10,000 cells/mL (±.10%) in the test flasks:	At this time it is not clear what the impact on the Seienastrum WET will be Corrective action will be taken for future trials.	No corrective action was taken at the time of the deviation.
2	SOP No: GSI/SOP/BS/RA/RT/8 – Procedure for Assessing Chronic Residual Toxicity of a Ballast Water Treatment System to the Green Alga (Selenastrum capricornutum; DRAFT). Section "QA/QC", ¶4. There was no QA count conducted during the S. capricornutum WET Test. A QA count of the algae cell concentration in at least 10 % of the test chambers must be performed during every trial.	The impact on Trial 6 WET Testing as a result of this deviation is that there is no measurement of operator/counting bias for the <i>S. capricornutum</i> WET Test.	No corrective action was taken at the time of deviation. It will be important to conduct QA counts on <i>S. capricornutum</i> WET Tests in the future in order to determine an acceptable level of bias.

GSI Research Team Member Comments: No additional comments regarding WET Testing SOP Deviations.

Signature: Kelsey R.

Prihoda

Digitally signed by Kelsey R. Prihoda
DN: cn=Kelsey R. Prihoda, c=US, o=LSRI,
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Reason: I attest to the accuracy and integrity of this
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Date: 2009.40.37.43.54.07.05.00

Procedure No: GSI/SOP/G/A/RK/1 Date Issued: August 14, 2009

Page 2 of 2

GSI Co-Lead On-Site Invest	igator Comments:
Signature: Matthew TenEyck	Digitally signed by Matthew TenEyck DN: cn=Matthew TenEyck, c=US, o=Lake Superior Research Institute, ou=University of Wisconsin-Superior. email=mleneyck@cwsuper.adu Date: 2009.10.27 133.9349-05707
GSI Principal Investigator C	Comments:
_{Signature:} Allegra Cangelosi	Digitally signed by Allegra Cangelosi DN: cn=Allegra Cangelosi, o=NEMWi, ou, email=acangelo@nemw.org, c=US Date: 2009.11.06 11:48.47 -05'00'